

1. A concentric hopper and burn chamber comprising:
a burn chamber in which to combust sulphur, the burn chamber comprising one or more
sidewalls, a base, a lid and a gas outlet; and
a hopper to hold sulphur to be combusted, the hopper comprising one or more sidewalls,
5 a base and a lid, wherein the sulphur hopper substantially surrounds the burn
chamber.

2. The concentric hopper and burn chamber of claim 1 further comprising a hatch in the
lid of the hopper to permit loading sulphur into the hopper.

3. A sulphurous acid generator apparatus comprising:
a burn chamber in which to combust sulphur, the burn chamber comprising one
or more sidewalls, a base, a lid and a gas outlet;
a hopper to hold sulphur to be combusted, the hopper comprising one or more
15 sidewalls, a base and a lid, wherein the sulphur hopper substantially
surrounds the burn chamber;
a first conduit connected to the gas outlet for conducting sulphur dioxide gas;
a second conduit for conducting a stream of water; and
means for passively introducing the sulphur gases conducted in the first conduit
20 into the stream of water in the second conduit.

4. The sulphurous acid generator of claim 3 further comprising means for substantially
eliminating any discharge plume comprises reducing the moisture content of the gases
and vapors exiting the apparatus.

5. A concentric hopper and burn chamber comprising:
a burn chamber in which to combust sulphur, the burn chamber comprising one or more
sidewalls, a base, a lid and a gas outlet;
a hopper to hold sulphur to be combusted, the hopper comprising one or more sidewalls,
5 a base and a lid, wherein the sulphur hopper substantially surrounds the burn
chamber; and
a housing adjacent the burn chamber to capture the radiant heat of the burn chamber.

6. A sulphurous acid generator apparatus, wherein the sulphurous acid generator combusts
10 sulphur creating radiant heat of and about the apparatus, the apparatus generating a discharge
of gases and/or vapors into the air causing a visible discharge plume, the improvement
comprising:

a burn chamber in which to combust sulphur, the burn chamber comprising one or more
sidewalls, a base, a lid and a gas outlet;

15 a hopper to hold sulphur to be combusted, the hopper comprising one or more sidewalls,
a base and a lid, wherein the sulphur hopper substantially surrounds the burn
chamber; and

means for substantially eliminating any discharge plume.

20 7. The apparatus of claim 6 where the means for substantially eliminating any discharge
plume comprises reducing the moisture content of the discharge.

8. The apparatus of claim 6 wherein means for substantially eliminating any discharge
plume utilizes the radiant heat created by the apparatus to reduce the moisture content of the
25 discharge.

9. The apparatus of claim 6 wherein the means for substantially eliminating any discharge plume comprises a heated housing through which exiting gases and vapor flow.

10. The apparatus of claim 9 wherein the housing is heated by radiant heat created by
5 combustion of sulphur in the apparatus.